EXHIBIT 1 TO OPPOSITION TO MOTIONS AT DOCKETS 211, 221, 225 AND 227

Witness	Objection	Response/Statutory Factor
Adams, Sr., Bert	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Such other matters as justice may require
	Subsistence resources & drinking water at Kivalina Not Relevant to liability	Rebut Plaintiffs' liability testimony
Andrews, Gene	No statutory penalty factor	Seriousness of the violation
		Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
Arnold, Scott	No statutory penalty factor Conditions at Kivalina and poor	Seriousness (significance of violations; harm to health and environment);
	 Conditions at Kivalina and near Mine Not Relevant 	Good-faith efforts to comply;
		Such other matters as justice may require
Barkey, Sue	No statutory penalty factor	Seriousness of the violation
	Lab Personnel Testimony Not Relevant	Economic Benefit
		History of violations
	Lab protocols Not Relevant under strict liability regime	Good faith efforts to comply with permit requirements
	 Explanation of effluent analysis etc Not Relevant-reports speak for selves 	Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Barr, Rose	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment);
		Good-faith efforts to comply;
		Economic impact of penalty;
		Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Booth, Gerry	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Such other matters as justice may require
Booth, Roland	No statutory penalty factor	Seriousness (significance of violations; harm to health and environment);
	 Conditions at Kivalina and near Mine Not Relevant 	Good-faith efforts to comply;
	Subsistence resources & drinking	Economic impact of penalty;
	water at Kivalina and NANA's	Such other matters as justice may require
	work Not Relevant to liability	Rebut Plaintiffs' liability testimony
Booth, Theodore	No statutory penalty factor	Seriousness (significance of violations;
	Conditions at Kivalina and near	harm to health and environment);
	Mine Not Relevant	Such other matters as justice may require
		Rebut Plaintiffs' liability testimony
Botz, Mike	No statutory penalty factor	Seriousness of the violation
	 WAD cyanide testimony is Not Relevant Explanation of permit violations is Not Relevant due to strict liability 	Economic benefit
		History of violations
		The good faith efforts to comply with permit requirements
	Teck Cominco not appeal Total Cyanide method so invalidity or inferiority Not Relevant	Such other matters as justice may require
		Compliance standards
		Permit requirements
Bozek, JoAnne	No statutory penalty factor	Financial impact of penalty
		Economic Benefit
		The good faith efforts to comply with permit requirements
		Such other matters as justice may require
Brix, Kevin	No statutory penalty factor	Seriousness of the violation
	 Water quality assessments & toxicological issues re effluent Not Relevant to liability phase 	History of violations
		The good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Compliance with permit

Witness	Objection	Response/Statutory Factor
Brown, Gerry	No statutory penalty factor	Seriousness of the violation
	Conditions at Kivalina and near	History of violations
	Mine Not Relevant	The good faith efforts to comply with permit requirements
		Such other matters as justice may require
Brown, Richard	Not sufficiently specific	Subjects properly disclosed
	Lab Personnel Testimony Not	Seriousness of the violation
	Relevant	Economic benefit
	No violations involve auto-	History of violations
	monitoring equipment or instream conductivity	The good faith efforts to comply with permit requirements
	Not Relevant	Such other matters as justice may require
		Alleged exceedances
		Excused non-compliance
		Compliance with permit
Capps, Stan	No statutory penalty factor	Seriousness of the violation
	 Lab Personnel Testimony Not Relevant Testing methodology & lab procedures Not Relevant due to strict liability Labs are evidence & speak to selves 	Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Chapman, Peter	Not sufficiently specific	Subjects properly disclosed
	Lab Personnel Testimony Not Relevant	Seriousness of the violation
		Economic Benefit
	• Vague	History of violations
	Test results are best evidence	Good faith efforts to comply with permit
	 No place for testimony re toxicology or effect of effluent on fish in liability phase 	requirements Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Chun, Eva	 Regulatory action and information re mine operations Not Relevant to liability Opinions re regulatory standards Not Relevant COBC's speak for selves in proving violations Evaluation of CWA is w/in ambit 	Seriousness of the violation History of violations Such other matters as justice may require Compliance standards Permit & COBC requirements Whether ongoing
Clark, Jeffrey	Evaluation of CWA is will amort of court Environmental management, mineralization or water balance not at issue, Not Relevant	Whether ongoing Permit compliance
Cohon, Keith	 Regulatory action and information re mine operations Not Relevant to liability COBC's speak for selves in proving violations Evaluation of CWA is w/in ambit of court 	Seriousness of the violation History of violations Such other matters as justice may require Compliance standards Permit & COBC requirements Whether ongoing
Collins, Kathleen	No statutory penalty factor	Seriousness (significance of violations; harm to health and environment; duration of non-compliance; history of violations); Good-faith efforts to comply; Such other matters as justice may require
Coulter, Gary	Environmental management, mineralization or water balance not at issue, Not Relevant	Whether ongoing Permit compliance
Dau, Jim	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Good-faith efforts to comply; Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Day, Steven	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water	Economic Benefit
	Treatment Systems Not Relevant	History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
DeCicco, Fred	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Good-faith efforts to comply;
		Such other matters as justice may require
DeForest, David	No statutory penalty factor	Seriousness of the violation
	Lab Personnel Testimony Not	Economic Benefit
	Relevant	History of violations
	History of WET testing & excursions of parameters Not Relevant to liability	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
Driver, Philip	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Good-faith efforts to comply;
		Such other matters as justice may require
Dryden, James	 No violations involve field monitoring equipment (rather effluent) so Not Relevant Testimony re Teck Cominco's commitment is Not Relevant 	Seriousness of the violation
		Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Permit compliance

Witness	Objection	Response/Statutory Factor
Echter, Anna	No statutory penalty factor	Seriousness of the violation
	 No claims involve conductivity testing, Not Relevant WET reports in evidence are best 	History of violations
		Good faith efforts to comply with permit requirements
	evidence	Such other matters as justice may require
		Alleged exceedances
		Permit compliance
		Whether ongoing
Eide, Steven	No statutory penalty factor	Seriousness of the violation
	Lab Personnel Testimony Not	Economic Benefit
	Relevant	History of violations
	• Test protocols, hold time logistics, etc. Not Relevant to liability	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Greene, Chuck	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Good-faith efforts to comply;
		Economic impact of penalty;
		Such other matters as justice may require
Hall, Wayne	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water	Economic Benefit
	Treatment Systems Not Relevant	History of violations
	 Reasons or explanations for violations are Not Relevant to Liability Red Dog policies & procedures Not Relevant to Liability 	Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
	,	Alleged exceedances
		Permit compliance

Witness	Objection	Response/Statutory Factor
Hawley, Raymond	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Such other matters as justice may require
Hingsbergen, Chuck	 No statutory penalty factor Mine Processes and Water Treatment Systems Not Relevant Explanations of issues involving port have no bearing on strict liability TSS testimony not relevant as SJ previously granted 	Seriousness of the violation Economic Benefit History of violations Good faith efforts to comply with permit requirements Economic effect of penalty Such other matters as justice may require Alleged port exceedances Permit compliance
Horner, Greg	 Not sufficiently specific Lab Personnel Testimony Not Relevant No E&E studies in evidence Testimony Not Relevant 	Subjects properly disclosed Seriousness of the violation Economic Benefit History of violations Good faith efforts to comply with permit requirements Such other matters as justice may require
Houghton, Jon	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Such other matters as justice may require
Huckstein, Lynda	No statutory penalty factor	Seriousness of the violation History of violations Good faith efforts to comply with permit requirements Such other matters as justice may require
Johnson, Lee	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Good-faith efforts to comply; Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Kelly, Karen	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Mine Not Relevant	Good-faith efforts to comply;
		Such other matters as justice may require
Key, John	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water	Economic Benefit
	Treatment Systems Not Relevant	History of violations
	 Feasability of treatment options Not Relevant 	Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
Koon, Ed	No statutory penalty factor	Seriousness of the violation
	 Mine Processes and Water Treatment Systems Not Relevant Explanations have no bearing on strict liability and are Not Relevant 	Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
		Alleged port exceedances
		Permit compliance
Kuit, Walter	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water Treatment Systems Not Relevant	Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Impact of remedy

Witness	Objection	Response/Statutory Factor
Kulas, Jim	No statutory penalty factor	Seriousness of the violation
	Limit testimony re maintenance of	Economic Benefit
	water balance, policies &	History of violations
	procedures, history of waste water permitting & efforts to comply as Not Relevant to liability	Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
		Procedures incorporated in permit
		Permit compliance
		Whether ongoing
		Alleged exceedances
Lackey, Kevin	Not sufficiently specific	Subjects properly disclosed
	Relevant Not show how relate to actual issues of liability Issues re lab no bearing on liability, Not Relevant	Seriousness of the violation
		Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Permit compliance
		Alleged exceedances
Lacouture, Brigitte	No statutory penalty factor	Economic Benefit
	 Mine Processes and Water Treatment Systems Not Relevant 	History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Lundberg, Jackie	Not sufficiently specific	Subjects properly disclosed
	Mine Processes and Water Treatment Systems Not Relevant	Seriousness of the violation
		Economic Benefit
	Vague description	History of violations
	• TIE/TRE Not Relevant to proving violation	Good faith efforts to comply with permit requirements
	• Explanations have no bearing on	Economic effect of penalty
	strict liability, Not Relevant	Such other matters as justice may require
		Alleged port exceedances
		Permit compliance
Malone, Keith	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water	Economic Benefit
	Treatment Systems Not Relevant	History of violations
	 Explanations of involvement in violations have not bearing on strict liability, Not Relevant 	Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
		Alleged exceedances
		Permit compliance
		Procedures incorporated in permit
Martinisko, John	No statutory penalty factor	Seriousness of the violation
	Mine Processes and Water	Economic Benefit
	Treatment Systems Not Relevant	History of violations
	• Explanations have no bearing on strict liability, Not Relevant	Good faith efforts to comply with permit requirements
		Economic effect of penalty
		Such other matters as justice may require
		Permit compliance
		Procedures incorporated in permit
		Alleged exceedances

Witness	Objection	Response/Statutory Factor
Middaugh, John	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Good-faith efforts to comply; Such other matters as justice may require
Mitchell, Gretchen	 No statutory penalty factor No claims involve conductivity testing, Not Relevant WET reports in evidence are best evidence 	Seriousness of the violation History of violations Good faith efforts to comply with permit requirements Such other matters as justice may require Alleged exceedances Permit compliance Whether ongoing
Napier, Robert	 No statutory penalty factor Mine Processes and Water Treatment Systems Not Relevant Explanations of factual events has no bearing on strict liability, Not Relevant 	Seriousness of the violation Economic Benefit History of violations Good faith efforts to comply with permit requirements Economic effect of penalty Such other matters as justice may require Permit compliance Alleged exceedances
Ott, Alvin	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant Not Relevant to liability phase 	Seriousness (significance of violations; harm to health and environment); Good-faith efforts to comply; Such other matters as justice may require Rebut Plaintiffs' liability testimony
Overpeck, Carl	No statutory penalty factor	Seriousness of the violation Such other matters as justice may require
Pannone, Steven	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment);

Witness	Objection	Response/Statutory Factor
Patton, Kent	No statutory penalty factor	Seriousness of the violation
	Lab Personnel Testimony Not	Economic Benefit
	Relevant	History of violations
	Lab reports themselves best evidence, testimony Not Relevant Lightites	Good faith efforts to comply with permit requirements
	to liability	Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Paulsen, Craig	No statutory penalty factorConditions at Kivalina and near	Seriousness (significance of violations; harm to health and environment);
	Conditions at Kivaiina and near Mine Not Relevant	Good-faith efforts to comply;
		Such other matters as justice may require
Peterson, Larry	No statutory penalty factor	Seriousness (significance of violations;
	Conditions at Kivalina and near Mine Not Relevant	harm to health and environment);
Pillard, David	No statutory penalty factor	Seriousness of the violation
	Lab Personnel Testimony Not	Economic Benefit
	Relevant	History of violations
	• Test result best evidence in & of itself	Good faith efforts to comply with permit requirements
	Methodologies & procedures Not	Such other matters as justice may require
	Relevant to liability once violation reported in DMR	Permit compliance
	Toponea in 2011	Alleged exceedances
		Explain DMR's and supporting documents

Witness	Objection	Response/Statutory Factor
Prieve, Mike	No statutory penalty factor	Seriousness of the violation
	 Lab Personnel Testimony Not Relevant Lab procedures Not Relevant to liability once violation reported in DMR 	Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Rense, John	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment);
		Good-faith efforts to comply;
		Economic impact of penalty;
		Such other matters as justice may require
Sampson, Walter	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment);
		Good-faith efforts to comply;
		Economic impact of penalty;
		Such other matters as justice may require
Sandvik, Helvi	No statutory penalty factor	Seriousness (significance of violations; harm to health and environment);
		Good-faith efforts to comply;
		Economic impact of penalty;
		Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Schierman, Mike	Not sufficiently specific	Subjects properly disclosed
	 Mine Processes and Water Treatment Systems Not Relevant Weather conditions Not Relevant to liability, permit violations or question of ongoing 	Seriousness of the violation
		Economic benefit
		History of violations
		The good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Alleged exceedances
		Permit compliance
		Legally excused non-compliance
Sheldon, Robert	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment; duration of non-compliance; history of violations);
	Willie 1vot Relevant	Good-faith efforts to comply;
		Economic benefit;
		Economic impact of penalty;
		Such other matters as justice may require
Shock, Scott	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment);
Sonafrank, Nancy	Testimony re water quality standards & aquatic life criteria & use of WAD is Not Relevant	Seriousness of the violation
·		Good faith efforts to comply with permit requirements
	Opinions of state official on contents or requirements of federal permit is Not Relevant to Liability	Permit requirements
		Permit compliance
Stambaugh, Sharmon	Opinions of state official on contents or requirements of federal permit & compliance is Not Relevant to Liability	Seriousness of the violation
		Good faith efforts to comply with permit requirements
		Permit requirements
		Permit compliance

Witness	Objection	Response/Statutory Factor
Stanoway, Mike	Not sufficiently specific	Subjects properly disclosed
	 Lab Personnel Testimony Not Relevant Testimony re surveys Not Relevant to liability Test reports serve as best evidence 	Seriousness of the violation
		Economic Benefit
		History of violations
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Stubblefield, William	Not sufficiently specific	Subjects properly disclosed
	Lab Personnel Testimony Not	Seriousness of the violation
	Relevant	Economic Benefit
	WET broad topic	History of violations
	 Test reports serve as best evidence Testimony re tests Not Relevant 	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Whether ongoing
		Alleged exceedances
		Explain DMR's and supporting documents
Thomas, Kevin	No statutory penalty factor	Economic impact of penalty;
		Such other matters as justice may require
Thompson, Mark	Limit testimony re maintenance of water balance, policies & procedures, history of waste water permitting & efforts to comply as Not Relevant to liability	Testify on challenged subjects will be offered only at liability phase only to extent necessary to explain liability issues
Thorton, George	No statutory penalty factor	Economic impact of penalty
	 Mine Processes and Water Treatment Systems Not Relevant 	Good-faith efforts to comply;
		Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Townsend, Al	 No statutory penalty factor Conditions at Kivalina and near Mine Not Relevant 	Seriousness (significance of violations; harm to health and environment); Good-faith efforts to comply; Such other matters as justice may require
Tsuji, Joyce	Not sufficiently specific	Subjects properly disclosed
	Conditions at Kivalina and near Mine Not Relevant	Seriousness (significance of violations; harm to health and environment);
	Not adequately specific	Lack of cyanide in Teck Cominco's
	Human health & drinking water in Wulik River Not Relevant to	Permit compliance
	Liability phase	Rebut Plaintiffs' liability testimony
	 No showing Relevance of work performed by Exponent 	
	• Expert reports not discussion violations or their ongoing nature	
Weakley, Jason	Not sufficiently specific	Subjects properly disclosed
	Lab Personnel Testimony Not Relevant	Seriousness of the violation
		Economic Benefit
	General and broad description	History of violations
	Testimony re chemistry & treatment of water Not Relevant to ongoing nature of violations	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Permit compliance
Weaver, Jeff	No statutory penalty factor	Economic Benefit
	Mine Processes and Water Treatment Systems Not Relevant	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Impact of remedy
Weber-Scannell, Phyllis	Conditions at Kivalina and near Mine Not Relevant	Seriousness (significance of violations; harm to health and environment);
		Good-faith efforts to comply;
		Such other matters as justice may require

Witness	Objection	Response/Statutory Factor
Willman, Kathleen	Not sufficiently specific	Subjects properly disclosed
	 Unaware of definition of "water balance issues" Water balance issues Not Relevant to liability 	Seriousness of the violation
		Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Impact of remedy
Zigarlick, Ted	No statutory penalty factor	Economic benefit
	Mine Processes and Water Treatment Systems Not Relevant	Good faith efforts to comply with permit requirements
		Such other matters as justice may require
		Impact of remedy